How to Keep "Fit"

or the

Soldiers' Guide to Health,

IN

WAR AND PEACE.

With Tips on Gas Poisoning, Frost Bite, Inoculation, etc., etc.

Compiled by
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WAR EDITION.

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INTRODUCTION.

A Soldier's manual of Health should be:—

Brief, Simple,

Portable, and the remedies recommended safe and get-at-able. This I have tried to remember, but the soldier serves under so many conditions and in so many climates that the task of preparing him for all emergencies is not easy.

I have to thank many different people, periodicals and books for hints. To these I acknowledge my indebtedness, but cannot mention them individually.

This is neither a medical treatise nor a literary effort. Anatomy and physiology I leave to the ambulance lecturer. The old saying, "Prevention is better than cure," is ever true, and accordingly this book will be found to contain hints on how to KEEP well as well as how to GET well.

Men may know their drill, be good shots, possess courage and resource, and be in every way good soldiers; but unless they maintain their health and fitness, they not only become useless as fighting units, but actually an encumbrance. Not only are they prevented from doing their own duty, but they take others away from theirs to attend to them. Many troubles from which the soldier suffers may be prevented, and many saved from becoming worse, by a knowledge of simple remedies.

In the South African War, for instance, 18,000 men were admitted to hospital for wounds, while 400,000 were admitted for sickness. Half of

this sickness was due to ignorance or thoughtlessness. This does not compare well with the state of the Japanese in the Russo-Japanese war, because highly successful precautionary measures were taken to ensure their immunity from preventable sickness.

Nobody can TREAT disease properly save the Doctor; the PRE-VENTION of disease is everybody's business. The soldier is not the dull, unintelligent fighting machine of former days; guided aright he will readily carry out rules for health. A series of Health lectures to soldiers now forms a part of their training.

I want to remind you of the difference between military and civil life. When you are at home many matters affecting your health are looked after for you.

Your food, drains, workshops, surroundings, water supply, contact

with infection, and other things affecting your health are all under the care of medical officers of health

and an army of inspectors.

On active service, when away from the R.A.M.C., each man should be his own sanitary inspector, not only for his own sake but for the sake of his comrades in arms, and when you have mastered the hints given you in this booklet pass your knowledge on when occasion arises to those who have not had your opportunity. The remedies I have suggested may not in all cases be the best, but they are such as men may be able to get at small cost and under ordinary conditions.

HENRY WAITE,

Major, R.A.M.C. (T.).

August, 1915.

HOW TO KEEP "FIT"

OR THE

SOLDIERS' GUIDE TO HEALTH

AGUE (See Mosquitoes)

Is another name for Malarial fever, and is a very weakening complaint, and the cause of much invaliding. Small doses of quinine are as useful in preventing the disease as full doses in curing. Average dose 5 to 10 grains.

BATHING.

When? If strong, before breakfast. If weakly—no. Best time two hours after a meal. Never if tired, depressed or chilly. Undress and get into water quickly in cool countries. Wet head at once, and keep moving.

As a rule, twenty minutes is long enough for anyone to remain in the water. In tropical climates this may be safely exceeded.

After drying with a rough towel, you should have a pleasing glow of the skin, and feeling of exhilaration.

If you are blue, cold and numb, and do not quickly get warm, bathing is unsafe and harmful for you, or you have stayed in too long.

Persons subject to palpitation, giddiness, or cramp should not bathe without medical consent.

If you fall into deep water and cannot swim, KEEP YOUR HANDS DOWN, and you will rise to the surface. By paddling you raise your head, and by the movement of walking upstairs your shoulders will rise above water.

BERI BERI.

A complaint affecting the heart and sometimes causing paralysis; is attributed to eating steam milled and polished rice. It will probably turn out to be a germ disease.

If away from a doctor, rest lying down, and avoid overfilling the stomach; a distended stomach em-

barrasses the heart.

BITES OF ANIMALS, SNAKES, etc.

I. Squeeze the part affected on the side nearest to the heart. If it is a limb, tie a cord tightly round. This is to stop the circulation carrying the poison into the system.

2. Make it bleed freely by

scratching with a knife.

3. Suck the wound, and, of

course, spit out.

4. Rush to running water and thoroughly wash, squeezing all the time. Apply Condy's Fluid.

5. Burn the part, if you know the animal to be dangerous, with a hot wire, a fusee, or gunpowder.

Give brandy or whisky and strong coffee to drink.

BLEEDING FROM THE NOSE

is rarely dangerous, but occasionally troublesome. Let the man lie down or recline in an easy chair, let him have plenty of fresh air, and undo tight clothing about the neck; place the hands at the back of the head, and apply cold to back of neck. The old-fashioned cold key or the blade of a bayonet will do.

Apply cold to face and nose.

Don't let him blow the nose, as this increases the flow and dislodges the clotted blood which acts as a plug, and helps to stop the bleeding. Snuff up from a saucer or dish strong cold tea, alum and water, or ordinary cold water. He should lie

quiet for a few hours, avoid exertion and stimulants, and take his food cold until bleeding stops.

Finally, if the other measures are not sufficient, plug the nostril with a long, narrow strip of clean rag, poking it in bit by bit, with a thin stick or pencil, but leaving the last two inches hanging out to remove it by. Leave in for three or four hours and draw out very gradually.

BOILS

are commonly met with when men are run down. Take a tonic—quinine or a teaspoonful of Easton's Syrup. Cover the boil with plaister, leaving a small hole at the top. Prick the top of the boil with a clean needle (heated in the flame of a match and cooled) and touch with carbolic acid or iodine.

BOOTS (see Sore Feet).

BUNIONS

are inflamed coverings to joints, and chiefly affect the large joint of the great toe. The remedy is a wide-soled boot, with square, roomy toes and low, broad heels. Apply for special boots, which may be supplied under Clothing Regulations, if disabled. If slight, paint with iodine and cover with a felt plaister with a hole in the centre. If inflamed, rest and sugar of lead lotion are necessary.

BURNS AND SCALDS.

Burns are caused by dry heat, scalds by moist heat. The treatment is the same. Keep out the air by applying oil and lime water, or a mixture of flour, pipeclay or whiting mixed with water to the thickness of cream, and covered with clean, soft rag or cotton wool. In severe cases, CUT OFF instead of pulling off the clothing, following

the seams if possible, so that the garments may be repaired afterwards.

Don't hold the part in front of the fire.

CHAFING.

Chafing or "firing" is best treated by washing the parts with water without soap, and using Fuller's earth freely as a dusting powder, separating the inflamed parts with a layer of clean rag.

The addition of a fourth part of boric acid powder is useful.

Ointments and greasy applications are not good. They keep the parts soft.

CHILLS.

Chills are very dangerous if neglected, and one is very liable to them when heated by exertion. Restore the circulation by rubbing, smart exercise, and warm drinks. Don't throw off your clothes all at once when hot, but cast them by degrees, and allow your body to cool gradually. Don't sit in a draught or under a punkah to cool.

CHILBLAINS

are caused by poor circulation of the blood in the extremities.

Soak the parts in warm water and afterwards rub with camphorated oil.

Make a paste of powdered alum and milk, and apply at bedtime. As this complaint attacks those who are run down, take a tonic, attend to general health, and wear boots and gloves which do not pinch.

CLOTHING.

Soldiers have a tendency to overclothe and to wear their heavy winter garments in warm weather, thus becoming overheated, exhausted and getting chills. In billets I have found them sleeping in shirts, vest, pants, sweater and trousers when in a comfortable bed with sufficient cover.

The excuse generally given is that if not worn they are "pinched." I refuse to believe the soldier is such a bad character as this would imply.

A long-sleeved waistcoat like that worn by stablemen is very useful for night guards, sentry go, and cold days and nights, worn under the tunic. Always wear flannel or undyed woollen underclothing. Cotton, when wet with rain or perspiration, is much more likely to cause a chill.

CONSTIPATION.

If perspiring freely, drink plenty of water. Eat fruit, green vegetables (carefully washed, especially in the East, in boiled water), brown bread, onions, figs, oranges (eaten fasting), prunes, bananas. Attend to the calls of Nature whenever possible, and train the bowels to act at a certain time daily, preferably after breakfast. Teetotallers often do not drink enough fluid.

Safe aperients are compound liquorice powder, confection of senna, or sulphur and Epsom Salts. In sudden and obstinate constipation, abstain from solid food till a clearance has occurred, and drink freely of water.

COOKING.

Every soldier should be some sort of a cook. Such knowledge makes your ration go further and be more appetising, and this affects your health and temper.

The following simple means of making balm by which, from the flour ration, excellent bread, cakes, dumplings, and the like can be made almost anywhere, have been supplied to the Author by an Officer who has seen much active service in India and South Africa:—

A tablespoonful each of sug flour, and rice (or a ripe banana or ripe pumpkin, or dates, etc.) put? into a soda water bottle made halffull with warm water, then tightly corked and tied down. Keep it in a temperature of not under 80 degrees for 24 hours, or until the cork comes out with a pop. If it gets chilled it won't ferment. Pour the contents then into a basin of flour, cover it over with flour, let it stand an hour or so in a warm place; before kneading for bread, take out a spoonful of the balm, mix with a teaspoonful of sugar and flour and warm water to make the bottle halffull, and re-cork for next day's use. Cork and bottle must be clean. The balm gets better after it has been going and been re-made for some This receipt was used for three months on an Indian jungle shooting trip; the first lot made with pumpkin lasted over two months, till bottle got washed away in flood.

f started it with rice. Excellent ead, dumplings, and cakes were made with it.

CHOLERA

always exists amongst the native population, especially in India. When cholera is prevalent every case of even slight diarrhoa should be attended to at once. Natives should be warned about unwashed hands, and fouling tanks and water supply. Keep your pecker up, don't work on an empty stomach, avoid chills, and wear a knitted cholera belt below the waist.

CLIMATE.

Men going from home to hot countries require some time before they adapt themselves to the altered conditions of life and living.

The young soldier going out to India and South Africa should remember that he is at the most sus-

ceptible age for fever (enteric or typhoid), that he is more likely to take it than an old hand, and that he cannot be too careful as to what he eats, and particularly as to what he drinks.

The digestive powers are somewhat lessened in hot climates, there is less appetite, less necessity for animal food, and more desire for cool fruits.

The amount of alcohol required in a hot country is less, but the amount consumed is often more. This indulgence makes a man more liable to heat-stroke, encourages the action of the skin, already prone to greater activity, and results in chills, and the troublesome affection called "prickly heat," to a greater extent than in the case of a moderate drinker.

A belt of woollen or flannel, about 9 inches wide, called a "cholera belt," is a very useful addi-

tion to a man's kit, and should be worn regularly when on active service.

CLEANLINESS.

One word as to cleanliness.

Remember the skin is a breathing organ. Don't let its pores get clogged with dirt; sweat, and the scales which are constantly being cast off, soon decompose and give off the peculiar smell which is so noticeable in a dirty person. Washing and bathing remove this, and the skin is then less liable to unsightly blotches and other affections. If a bath is an impossibility, a rub down with a wet cloth is the next best thing. Clothing which cannot be washed should be exposed to fresh air, and, if possible, sunlight. These are Nature's disinfectants.

CORNS.

Corns are of two kinds—hard and soft. They are caused by boots which are either too small or too large, by pressing in the one case, and rubbing in the other.

Hard Corns.—Pare off the top thick skin with a sharp knife, and apply glacial acetic acid on a match night and morning to the surface of the corn. Peel off the top as the acid acts on it, and apply again till the corn disappears. Salicylic plaster answers the same purpose, or ordinary plaster or felt with a hole in the centre to remove the pressure may be used.

Soft Corns are found between the toes. Separate the two moist surfaces by means of plaster, or felt, with a hole in the centre, and try to keep the parts dry with Fuller's earth.

DIARRHŒA

comes on from chills or from unsuitable food or drink, such as unripe or decaying fruit, dirty water, or food which is fermenting or "turning." A single dose of castor oil, followed by milk (boiled) and soda water, or strong fresh tea, cooled, and avoidance of hot or fermented drinks, fruit and vegetables will cure many cases. Keep the lower part of body warm by a flannel or woollen belt, and take 15 drops of chlorodyne in water every three or four hours.

DRAWERS

should always be worn; besides being cleanly, they serve to protect the wearer from chills and cold.

DYSENTERY

is a specially bad form of diarrhæa. Treatment—as for diarrhæa, and report at once to doctor.

DRINKS.

Next to water, cold tea is, perhaps, the best drink for a march, and this should be unsweetened, then, if the bottle leaks, it is not so sticky and likely to soil the uniform. Beer and spirits are bad during the march, but may be consumed in moderation at the end. Don't drink large quantities of any cold fluid when you are heated; it is likely to bring on colic, etc.

Don't drink beer or spirits in any quantity till after sunset, as it takes away energy and makes you feel

drowsy and stupid.

Don't drink spirits unless freely mixed with water. Neat spirits inflame the lining of the stomach, impair digestion, and cause dyspepsia. As a matter of fact alcohol is quite unnecessary in health.

Drinking is largely a habit, and the more you drink the more you

want.

Be careful of the drinks sold in native bazaars. Even soda water may be made from polluted water. Native sweets, of which the young English soldier is sometimes very fond, have been found to be a cause of enteric fever.

DRUNKENNESS

is much less common than formerly. If certain a man is drunk give as an emetic a tablespoonful of salt or mustard, in a glass of aired water.

A drunken man's vitality is lowered and he soon catches cold. Wrap him up warmly, and rub briskly to keep up his heat.

DRY AND CRACKED SKIN

from ill-health or exposure. Apply vaseline or boric ointment rubbed well in.

EATING.

Most of us eat too quickly without sufficient chewing. We then eat more than we require, and the food not being properly masticated does us less good and overworks the stomach. Also it is necessary for good digestion that our food should be mixed properly with the saliva, otherwise it is not ready for the stomach to deal with it.

EARS.

Never poke any hard substance, such as matches, pencils or pins, into the ear. A soft rag twisted to a point is safe. To soften wax use a few drops of oil or glycerine, and next day wash or syringe the ear with aired water. If insects get into the ear when sleeping in the open, fill the ear with oil to kill the beast and wash out. If this does not remove it, get a careful friend or

R.A.M.C. orderly to coax a narrow loop of wire like a hairpin past the offender and draw it forward. "Coax," use no force.

ELECTRIC SHOCKS (including Lightning).

As Surgeon to Telegraph Companies, R.E., a few hints on this subject are necessary. The wireless transmitter (strength 8,000 to 10,000 volts) may give a dangerous shock and smaller effects may result from the dynamo. Treat for Shock. Lay person down flat, undo tight cloth-ing round neck, chest and waist. Plenty of fresh air. Flick face and chest with wet towel. If patient does not come round, pull down lower jaw, seize tongue, using a handkerchief to prevent slipping, and pull it forward, hold for two seconds and allow it to go back. Do this 15 times a minute.

EYES.

I recommend soldiers suffering from any eye complaint to see the doctor. If you find your eyesight failing, especially by artificial light, and you have constant headaches, with a feeling of "dust in the eye," get your sight tested. It may be the result of eye strain, a serious complaint which may need glasses. The amateur doctor can do as much harm to a bad eye in 10 minutes as it may take 10 weeks to remedy. I would go even further and say that by using a remedy good and useful for one condition but utterly unsuitable for another, I have seen more than one case of blindness follow and many cases of acute suffering from amateur doctoring.

FAINTNESS.

comes on from heat, tight uniform, belts, and the pressure of heavy accoutrements, fatigue, over indul-

gence in tobacco and liquor, with its consequent loss of appetite, excitement, and various causes.

Lay the patient down flat in the shade and in a current of air. Loosen anything tight about the neck and body. If in a tent carry into the open air. If in barracks open all windows, and, wherever you are, prevent crowding round the sufferer.

Give a little water, spirit and water, or sal volatile in water, as soon as the person can swallow.

FLIES.

Since I first put this booklet together, flies have been found to be responsible for spreading disease wholesale. They breed in manure heaps and amongst refuse, and increase at a terrible rate. It only takes seven days in hot weather to hatch out a fly.

They go into all sorts of nasty places, walk over all sorts of garbage and filth, and directly they hear the dinner call tumble over each other in their haste to fall into your food, carrying disease and germs with them. Always suspect any place as unhealthy if infested with flies.

Endeavour to baulk them by covering up all food and drink not in use, and make a point of "swatting" every fly you can. Gauze covers for food, made from the muslin covers of frozen meat and wire meshed meat stores, are very useful.

Cover all refuse with chloride of lime, or, if not available, six inches of earth. For houses and barracks, a teaspoonful of Formalin to two tablespoonfuls of milk in a saucer is very fatal.

FOOD (see Tinned Foods).

Beware of tainted food, especially fish. It may cause poisoning. Raw vegetables often contain parasites, and require careful washing in boiled water, to which a handful of salt has been added. Avoid marching on an empty stomach if possible.

FOREIGN BODIES IN THE EYE.

- r. Place the face in a basin of warm water and try to open the eyes.
- 2. Gently pull the upper lid over the lower one with the thumb and finger.
- 3. Gently pull down the lower lid. If you see nothing there, examine under the upper lid, which is done by placing a match or hairpin, or thin pencil, flat against the top of the upper lid, and gently turning the lid back over it by pulling the eye-

lashes. Remove the particle, chipping, dust, fly, or whatever it is, with the twisted point of a clean rag, handkerchief, or paint brush. If it will not move see the doctor.

FITS.

If person is pale, lower head level with body, if flushed raise head. See he does not injure himself. No stimulants. A flat piece of wood or a cork between back teeth will prevent biting of the tongue.

FROST-BITE

is due to exposure to cold. A person exhausted or drunk is specially liable. The parts affected become numb, shrunken, cold, and of a pale bluish colour.

Frostbite has become so common a form of disablement, having put nearly 10,000 men out of action during trench warfare in the winter of 1914-15 that it has become of great importance from the military standpoint. If men are confined to trenches, over the boot tops in cold mud, water or snow for days, without much opportunity of moving about, some cases are bound to happen.

Tight boots, tight puttees and worn socks will help this condition.

Some have found gum boots, others fishing waders, with two pairs of stockings, of good service.

It is obvious that a man has a better chance to avoid this who has planks, straw, sandbags, benches or any means of keeping above highwater mark. Greasing the feet well has proved a useful preventative.

As soon as possible when relieved from duty remove boots and socks, dry the feet and apply friction from below upwards, changing into dry socks if you have them. Restore the circulation by rubbing with the hands or with snow. Then give stimulants, hot whisky, coffee, or milk.

Keep patient away from fire until circulation is restored, or serious harm may follow, even mortification with loss of a limb, nose, finger, or toe. If sores result dress as for burns.

CARTERS

in Highland regiments are often worn too tightly. This interferes with the circulation in legs and feet, and may cause cramp and varicose veins.

CAS CANCRENE

is commonest in wounded left for a long time on the field. The skin is often copper-coloured and puffy round the wound, and bubbles of gas form in the discharge. The prompt and careful application of the First Field Dressing will help to prevent this complaint. C 2

GAS POISONING.

A new terror has been added to modern warfare in the shape of gas poisoning. The remedy for this dangerous and disabling "invention of the devil" (see a recent despatch) cannot, for military reasons, be given here. Suffice it to say that every man at the front is carefully instructed in the methods of dealing with this danger.

CUN CONCUSSION

may rupture the drum of the ear and cause deafness. Plug the ear gently with a soft substance which can be easily and completely withdrawn, or obtain the use of artificial ear drums or elastic plugs. Mallock-Armstrong's Ear Defenders are highly spoken of, and do not interfere with hearing, a vital point for an artillery observer.

CYMNASTICS.

Avail yourselves of the opportunities which the Gymnasium affords you of improving your health and developing your muscles. In the exercises you go through every muscle in the body has a turn, whereas in your daily work you only use certain muscles, and your development is unequal. Gymnastics often improve a badly formed chest, and recruits have gained as much as two inches in six weeks.

HANDS.

Clean hands, please, especially when handling food or wounds. Keep your finger nails short and clean, or you may infect your skin if you scratch yourself.

Dirty hands may poison your food. Regimental cooks should be

especially careful.

HAIR.

"The hair of the head will be kept short. The chin and underlip will be shaved, but not the upper lip." King's Reg., 1912, Para. 1696. This regulation makes for convenience, smartness and cleanliness, but if overdone deprives the head of its natural protection from extremes of heat and cold.

Always Leep your brush and comb strictly for your own use. Many forms of baldness are contagious, and the germs of hair disease may swarm in a horrowed brush. A metal comb is to be preferred, as it can be sterilized, i.e., cleansed, by boiling. Be just as particular not to borrow caps or any form of headdress.

Ringworm and bad cases of dandruff or scurfy head should be reported to the M.O.

INDICESTION.

Give the stomach a rest occasionally. A day's fasting when you are not working hard is very beneficial. For Heartburn take as much bicarbonate of soda as will cover a three-pennybit, in water. Gregory powder is an old-fashioned but very good remedy for indigestion. For vomiting, soda water is useful. Attend to the bowels.

INOCULATION.

LORD KITCHENER'S APPEAL TO "ALL SOLDIERS."

Kitchener prefaces the following

appeal thus:

"I commend to the careful attention of every soldier the following statement, to which, in the interests of health of the army, I attach great importance.

"In every campaign typhoid fever is a serious element. In the South African War there were many more casualties from typhoid

fever than from wounds.

"In the present war the best is being done to prevent typhoid fever by extreme precautions in the matter of water-supply, as well as other sanitary measures; but in spite of this a number of men have been afflicted by the disease.

"In the British garrison in India, where about 93 per cent. of the men

are now inoculated, the deaths from typhoid fever have been reduced from several hundred per annum to less than twenty. In the army of the United States, where inoculation against typhoid is compulsory, there were last year, among 90,000 men, only three cases of typhoid fever and no deaths.

"Inoculation Gives the Body Power to Resist Infection.

"It is a means of protection in the efficiency of which those who have studied the question have complete confidence.

"Inoculation has nothing to do with vivisection.

"The great value of inoculation is shown clearly in the following

figures:—

"Of the 421 cases in the present campaign among British troops, 305 cases were in men who were NOT INOCULATED within two years.

"For your sake, for yo country's sake, and for the sake of the army, you should not fail to avail yourself of the protection secured by this simple, safe and well-tested measure.

"Medical officers are always ready and anxious to inoculate any soldier, at any time, and the greatest care is taken in doing so. With proper care it has never been known to do a man harm."

LEFT-HANDEDNESS.

How awkward most people are with their left hands! It is partly due to heredity, and partly to habit and practice; but it could be overcome. The left hand and arm might vated to the same degree of .ty as the right hand and but it involves trouble, time, patience.

LINES.

When in camp, pay particular attention to keeping the lines scrupulously clean, and free from refuse of any kind. Litter of paper, empty packets, cigarette ends, and used matches, bottles, and tins give the show away, and this form of carelessness is the first thing that strikes the eye of an inspecting officer.

Bread, pieces of fat, and other waste should not be thrown upon the ground, but placed in the refuse tub or pit provided. Such things soon decay, and foul the air in the lines. Always replace the covers of refuse tubs.

The golden rule about refuse is "Burn all that will burn and bury the rest."

Above all, do not, from idleness or on account of wet weather, commit a nuisance in the lines. Latrines, to accommodate all, are provided. Use them yourselves, and insist on your tent mates doing the same. Fouling the lines is both disgusting and dangerous to health.

Remember the rain trench dug round a tent is not a REFUSE pit, nor a night latrine. Remember also urine may carry disease as well as

the excreta.

MALTA OR MEDITERRANEAN FEVER.

may be caused by bites of insects from sick to healthy persons, or by germs entering through a sore place, but in most cases is due to drinking goat's milk, which should be avoided or boiled before use. The use of condensed milk by the

troops is, I believe, compulsory. Three-day fever, a special form, is caused by the bite of the owl midge.

MESS TINS, PLATES, AND UTENSILS.

should be left most scrupulously clean, as food left sticking to them soon goes bad, especially in warm weather.

Drinking cups, after washing, should be left upside down to allow them to dry. Pans may be best cleaned and polished by using a sod of turf and some water; earth is a great purifier. See that native tinkers use tin and not lead for soldering.

MEDICINES.

I have been frequently asked by men going on active service what they should take in the way of medicines. A man cannot carry a chemist's shop with him. I usually recommend four drugs only, and these are CHLORODYNE, QUININE, VASELINE, AND BORIC POWDER.

The first in ounce stoppered bottles, the second in compressed tabloids of two grains each, the third in leaden tubes. Chlorodyne is useful in 10 to 20 drop doses in water for cholera, diarrhæa, cramp, spasms, colic, any pain in the body, sleeplessness or dysentery.

In two or five-drop doses in water for a violent cough, hiccough, or severe cold, spitting of blood, influenza, but not bronchitis.

Remember that chlorodyne is a medicine, and a very powerful one, and must not be played with. It contains morphia, chloroform, Indian hemp, and prussic acid, amongst other ingredients, and care must be taken, both in measuring out the dose, and also that a habit of taking it too frequently, without a sufficient reason, is not acquired,

a habit which some get into, and

which is not easily broken off.

Quinine is used in half tabloids as a tonic, for debility, loss of appetite, loss of strength from exhausting discharges and abscesses. In full tabloids for neuralgia, toothache, headache, and night sweats. Two or more may be given for ague, malaria and swamp fever, and for high states of fever generally, to bring down the temperature; the dose increasing if the patient is used to the drug.

Warburg's tincture owes its beneficial effect to the quinine it contains.

A most useful article for the soldier to carry is a supply of vaseline. It never goes bad, it is cheap and may be obtained all over the world. Its uses are various. It is a good application for burns, scalds, chaps, chilblains, sunburns, wounds, sprains, and all skin diseases, inflamed eyelids, blisters, and sore feet. It is non-poisonous

and non-irritating and makes the finest pomade if the hair is falling off. As an anti-corrosive it is a splendid thing to keep bayonets, swords, metal tools, bicycles, rifles, razors, and knives free from rust. It softens, preserves, and water-proofs leather. The mounted man will find it useful for most external diseases in horses, skin troubles, mange, cracked heels, and sore backs. It is also useful to keep off flies.

The fourth drug I advise is a supply of boric powder. It is a splendid antiseptic, and is neither poisonous nor painful. As a dusting powder for sores, mixed with vaseline it makes a universal ointment (a saltspoonful to an ounce), added to water (a teaspoonful to a pint) it makes a useful lotion for sore eyes or sores anywhere.

MILK.

Should always be boiled, especially in the tropics, where water from germ-laden ponds and tanks is often added, and cow sheds and utensils often dirty. Protect from dust and flies by a cover.

MOSQUITOES.

Now that malaria (ague) and yellow fever and several other diseases have been proved to be caused by the bite of the mosquito, which infects the blood with a parasite, the soldier should guard himself by the strict use of a small meshed curtain carefully tucked in under the mattress before sundown (night being the time the insect generally bites), not hanging down to floor, as mosquitoes may hide under the bed. The bottom 18 inches of the net should be of strong calico, lest the arms and legs be bitten through the

net. When travelling after sun-

down wear gloves and a veil.

Never camp near stagnant water—the mosquito's home—or close to native quarters; most natives are infected in certain districts, but become hardened, or "immune" as doctors call it.

The young mosquitos float at the top of stagnant water pools and storage tanks. A thin layer of paraffin or any oily fluid kills them. Prevention is better than cure or netting.

When you have got the symptoms it is equally important to destroy the poison in your blood by doses of quinine in full doses, say 5 or 10 grains or more if you are accustomed to the drug.

POISONING.

The symptoms of poisoning are: Sickness, vomiting, cramp, de-lirium, pain in stomach, and uncon-

sciousness. I shall not say much under this heading, but if you come across a case of poisoning by accident or design, the few rules to observe are:—

- 1. Get the medical officer there at once, and say what the case is.
- 2. When a person has swallowed poison, and threatens to go to sleep, don't let him. Keep rousing him. When he seems to be going off in a fit, dash cold water in his face. When there are no stains about the mouth and you are sure he has not swallowed acid, make him sick with salt or mustard and water.

Where there are stains about the mouth, give him eggs or oil, and then tea, but no emetic.

If you know he has taken an acid, give an alkali, such as a teaspoonful of magnesia, chalk, whiting, or plaster off the wall in milk. If he has taken a strong alkali, such as ammonia or caustic potash, give

weak acid, such as vinegar and water, or lemon juice, and follow this up with egg, milk and tea as before.

Carbolic acid deserves a special mention. It is as well to know that plenty of Epsom salts, in water, is the best remedy, followed by plenty of milk.

If poisoned by berries or fruit, give an emetic and follow on with a dose of castor oil.

POULTICE.

If you have a gathered finger, abscess, or large boil, it may be useful to know how to make a poultice. Place a basin in an oven or beside a fire till quite hot, then break the required quantity of bread (without crust) into it, cover with boiling water, and set a plate on the top till the bread has soaked up as much water as it will take; strain the water off. Have ready a piece of old

linen, and spread the poultice on it about one inch thick; a dry flannel cloth should be folded several times and put over the poultice, to keep in the heat, and when it is placed on the affected part, a bandage should keep the whole in position.

PRICKLY HEAT

is due to excessive perspiration. Don't scratch, bathe regularly, use a good soap, and dust with equal parts of starch and boric acid powder.

PURITY.

A manual of this kind, addressed to men, would be incomplete if no reference were made to this important subject.

Lord Kitchener specially warned soldiers against the risks they run

by intercourse with women.

Bear in mind that whilst the passions are strong in most men,

they are not so strong but that they may be brought under control, without any harm to the individual, as Nature can adapt herself to all such circumstances.

The development of the passions may be increased or delayed, excited, or lowered by various means, and purity is not only possible, but given the wish, easy.

Desire may be restrained by avoiding impure conversation, thoughts, and temptation, and, secondly, by the regular employment of muscular and mental exercises.

Bad companions and bad books are responsible for much of this evil, and the reason I lay such stress on this somewhat delicate subject, is because I want you to realise that the price you may have to pay for unlawful and momentary gratification, may extend not only over your

own lifetime, but over that of your family, if you ever have any.

This knowledge of the fearful penalty many have to pay for such indulgence, should be in possession of you all, so that you may never say that you were not warned.

Lastly, should your sin find you out, and you contract disease, at once for your own sake and for the sake of others, place yourself under proper treatment. Quackery and delay may be your ruin.

RASHES.

All rashes should be reported to the medical officer when they **first appear** and not after two or three days, when they are so easy to recognise or have almost faded.

You may have scarlet fever of so mild a kind you may not know you have had it, and yet may be highly infectious to others.

RATIONS.

Rations are good and sufficient,

but a trifle monotonous.

Much ingenuity may be exercised by cooks in varying the dishing up of the supply in fresh ways. Some weird dishes have been the result during the war, and our French Allies have raised this branch to a fine art. They only seem to want a hone, a "borrowed" cabbage, hot water and salt to produce a most appetising soup.

When inspecting rations, I frequently point out how meat is spoilt in cooking. Overdone meat is hard, indigestible and wasteful, and loses much flavour and a great part of its

nourishing properties.

SAND FLEAS,

or chiggers, burrow into the skin and form sores. Look for black speck, and with a clean needle dig out the beast without crushing it.

Wear strong boots when walking in sand or in huts and places where they swarm.

As a preventative dust insect powder into your boots and into the cracks in the floor.

SEA SICKNESS

is a nervous sickness like that caused

by swinging and roundabouts.

Diet before embarking should be light. Remain on deck in fresh air and wrap up warmly. Even if sick take your food, and determine you won't be ill. The mind has a great influence on sea sickness. watch the moving water. If you feel bad, ask the sick-berth steward to give you four drops of chloroform on a lump of sugar.

SCURVY

is not a common affection nowadays, as there is less overcrowding and the sanitation and feeding of soldiers is

on a more scientific scale. It is most likely to occur where men are forced to live on salt or preserved meat without vegetables or variations in diet. Fruit, lime or lemon juice added to the diet is the remedy. For "spongy gums," alum and water as a mouth wash.

SHAVING.

Long lather—easy shave. For a tender skin cold water is better than warm. It takes more time, but opens the pores less. Don't try to shave too close at first. Keep the razor flat on the skin and push rather than cut. Always strop the razor after shaving, and dry your face thoroughly.

For use on board ship a cheap safety razor is invaluable, and on service for quick shaving or shaving in the dark.

SMOKING.

Is smoking harmful? To many—yes.

Tobacco contains nicotine, one of the half-dozen most deadly poisons known. Fortunately this dangerous oil is partly destroyed by burning, but even then enough escapes this process to produce certain effects mainly on the nervous system. Palpitation, irregular action of the heart (tobacco heart), dimness of sight, dyspepsia and lowering of vitality, are all produced by heavy smoking, if the individual is susceptible to the tobacco poison.
This susceptibility differs widely in different people, and only personal experience can be your guide. One pipe a day is too much for some people, and others may smoke an ounce a day with impunity. The heavy smoker is never quite as fit as he might be if he did not smoke, or smoked in moderation. He cannot walk so far, shoot so straight, row, cycle, play cricket, or do anything requiring nerve and muscular fitness quite so well as if he did not smoke. To some tobacco is a benefit. It often removes irritation, helps to tide over a tedious period, and by adding happiness may promote health. One cannot always do the thing he knows to be right, but as nearly as possible the following rules should be observed:—

Smoke after meals only. Smoking before meals interferes with digestion and may bring on palpitation and faintness.

Do not smoke until work is

finished.

If you smoke at night, rinse the mouth before going to bed.

Do not smoke when walking or

taking exercise.

If you smoke indoors, do so in a well ventilated room.

Smoke a pipe. It is less harmful than cigars or cigarettes. The latter being ready-made tempt you to light one whenever you have a spare moment, and to inhale—a very bad habit. A clay pipe is the healthiest, clay being porous absorbs more of

the oily juice.

Throw a pipe away when it gets foul. At least pass steam through it periodically to cleanse it, or after stopping up the stem with a match fill the bowl with whiskey, prop it upright, and let it soak in till next day. This will dissolve out much of the oily fluid. Strictly speaking, no one should smoke before the age of 21—a youth is not fully formed till then, as a rule, and tobacco, by interfering with nutrition, may check the growth.

Smoke slowly. You get more flavour out of the tobacco and less burning of the tongue. Always let your pipe cool before filling it

again.

Chewing tobacco is a filthy and unwholesome habit, for which I cannot say a good word.

SELF-CONTROL.

I have dealt with this under the heading of "Purity." It applies to many things—over-eating, over-drinking, over-smoking, and any excess. Men have a bad habit of falling out on the march to ease themselves, not once, but frequently. This is largely due to want of self-control. If you notice, your officers rarely do this.

SOCKS

should be made of natural and never coloured wool. The perspiration fetches the dye out, and causes soreness and even blood-poisoning.

SORES.

If a scratch or cut festers and does not heal kindly it means it has

become infected with a germ and though trivial at first may become serious if not attended to.

Veldt sores, so common in the Boer War, are one form of infected sore, and are very persistent.

SORE FEET.

The Care of the Feet.

It is of great importance to the soldier to keep his feet in good working order. There are several causes which produce sore feet, the chief of which are:—

- 1. Badly fitting boots.
- 2. Unsuitable socks.
- 3. Perspiration in an unventilated boot.
 - 4. Naturally tender skin.

Boots should fit properly and not be too new. Don't break a new pair in on a long march, but do so more gradually at more suitable times. They should not be too large or blisters will be caused, nor too short, to cramp the toes and produce "hammer-toes." If too narrow in the sole the toes are crowded and ride upon the top of each other, and the foot cannot expand as it should do when the weight of the body falls upon it.

The inner edge of the boot should be straight from heel to toe. If the boot toes are pointed, the great toe is pushed outwards. The soles should be fairly thick. Thin soles feel every inequality in the ground and soon cause tenderness. The "waist" of the boot should be made pliable by bending the toes of a new pair several times till they almost touch the lace holes. The heel should be large and low and there should be no hard seam down the centre of the heel.

If boots have been stored away for any length of time, they should be washed free from blacking and well greased with dubbin, mutton fat, or castor oil before using. The best time to grease boots is after wearing them in wet weather, when the blacking has been softened, and the pores of the leather are open. It then "feeds" on the grease more readily.

New boots should be tried on over two pairs of socks.

DON'T break in a new pair of boots on a route march. Wear them for lighter duty for a day or two.

To prepare the feet for a march: This is best done by frequent washing and daily "pickling" the feet for ten minutes or a quarter of an hour in hot salt and water, to which is added as much boric acid as will dissolve or by soaking them in alum and water. Methylated spirit is a good application for hardening the feet. Then attend to toe nails,

corns, etc. If you have corns and similar hard places cut or scrape them whilst the feet are soft from the "pickling" recommended; and as they are caused by unequal pressure at some particular spot, attend to your boots. Soft corns between the toes should be scraped directly after the footbath and dusted with boric acid, and the toes separated by a

strip of lint.

See that your socks are in good condition. They should be made of wool, because it is thick and elastic and dries readily, without coloured dye, and free from creases, knots and cobbled or lumpy darns. Before putting the boots on, pull the socks forward to give a little play to the toes. If they are "rucking" up, change the socks from one foot to the other, when halted, or turn them inside out. Immediately before the march wash the feet in hot water, and before putting on the socks smear the feet well with vaseline, tallow, oil, fresh fat, or soft soap worked up into a

lather with the hand.

The third cause of sore feet is excessive and sour perspiration, which cannot escape, and becoming mixed with particles of cast-off skin, decomposes and causes soreness and smell. The bathing and "pickling" already recommended is the best remedy for this trouble, both as a preventative and for the cure of this complaint.

Condy's Fluid, the use of which is widely known, is an excellent thing to add to the footbath for sore feet and a very useful ointment for hardening the skin may be made by adding one part of Tannin Ointment to 20 parts of Zinc Ointment.

If you cannot wash your socks and feet regularly, use as many pairs as possible. Never wear the same pair two days running, but hang them up to dry and beat and scrub them before you put them on again. A

penny pepper box full of powdered boric acid is most useful, and a little of the powder dredged into the boot before lacing up, will keep down any unpleasant odour, and reduce liability to soreness.

I recommend those suffering from "sweaty" feet to soak their socks in a strong solution of boric acid and hang them up to dry without wringing them out, so that the acid is left in the material as the water dries out. Several pairs prepared in this way, which is neither troublesome nor expensive, should be used alternately. Boric acid is about 3d. per ½lb.

The last cause of sore feet is a specially tender condition of the skin either natural or acquired, which the precautions above mentioned will minimise. Blisters must be pricked after and not during marching, but the skin must not be torn off. A needle full of worsted

may be passed through the blister, and the worsted left in to drain the fluid out, and removed before marching again.

If your boots do not fit, no amount of trouble will make them comfortable and they should be changed.

Look well after the repair of your boots. Nothing is so detrimental to health and smartness as brokendown boots.

Wet boots should not be placed too near a fire, but should be packed with dry grass, hay, straw, or paper until dry.

Never march with bare feet in your boots. If your socks are done, wrap the feet in some sort of bandage or rags.

SPITTING

is not only a nasty but may be a dangerous habit. The germs of consumption are contained in what is spit up, which dries and floats about

in the air. It is specially liable to injure those whose relatives have suffered from consumption. If you have a chronic cough, do not spit on the floors of corridors, rooms, or even stables.

SORE THROAT.

All sore throats are more or less infectious, and should be reported at once to the medical officer. A sore throat may be the only symptom noticeable of diptheria, scarlet fever, or rheumatism. If he is not at hand, wet your handkerchief and tie it round your throat at bed time, gargle with teaspoonful of salt in tumbler of water or aired water just coloured purple with Condy's Fluid, and take 2 grains of quinine three times a day.

SPRAINS.

If attended to at once cold applications are best, but if there is much

swelling bathe the part with hot water and give it complete rest.

STINGS OF INSECTS.

If sting be left in, press a watch key over the wound to squeeze it out. Apply raw onion, a drop of ammonia, washing soda, or the blue bag borrowed from the "married patch." For faintness and shock caused by wasps, bees, or scorpions, give stimulants. For mosquito, harvest bug or gnat bites, Glycerine of Carbolic acid is a good outward application.

STRETCHERS.

It is sometimes necessary to carry a man, who has been injured, by means of a stretcher, and as these are not always handy, or may be already in use, we should know how to make a makeshift.

- 1. Hurdles, doors, shutters, or gates well covered with clothes, hay or grass.
- 2. Blankets, with a loop sewn at each corner, with two poles, rifles, or lances. Directions for rifle and blanket stretcher:—Spread a blanket on the ground, lay two rifles parallel to one another, each ten inches from the centre of the blanket, both muzzles pointing in the same direction, trigger guard outwards; turn a fold of the rug or blanket six inches wide over the ends of the butts; fold the right side of the blanket over the rifle on that side to the rifle on the opposite side, then similarly fold the left side.
- 3. Sacks or sand-bags may have the poles or rifles passed in at the mouth and out at each corner.
- 4. Belts and straps may be laced under and over two poles or rifles.
- 5. Take two great-coats, turn the sleeves into the inside of the

garments, and pass the rifles through them, after which each coat is buttoned down the front in the usual way.

N.B.—Always test your litter, as nothing is more distressing than a break-down with an injured man.

SUNBURN AND SWOLLEN FACE.

If this occurs wait till face is quite cool before washing. Use only warm water, or better still, hot milk. Do not use SOAP. Off parade smear with vaseline, cold cream, or boric ointment.

STRAINS,

or injuries to muscles, require rest and rubbing with liniment, such as white oils, Elliman's Embrocation, or the old-fashioned opodeldoc.

Both strains and sprains are benefited at first, if acutely painful, by

fomenting with hot water.

SUNSTROKE AND HEAT STROKE.

Sunstroke comes on during the day. Heat stroke at any time in a stuffy tent or small hut. Remove to the shadiest and coolest place. Apply cold to head and back of neck, pieces of ice or pour cold water from a height. Sponge hands, feet, and chest with cold water and give weak stimulants.

If working in the sun without a puggaree, protect the nape of the neck by wetting and tucking your handkerchief, or some large leaf that may be handy, under your cap or helmet, and letting it hang down. Leave for this may generally be obtained. A spinal pad fixed in the lining of the coat when riding, shooting, or on the march, is a good protection against the sun.

Turning up trousers and wristbands helps to keep you cool when marching at ease or working.

SWIMMING.

Every soldier ought to learn to swim. Always learn with someone who can. Avoid danger. You will not learn the worse for being safe.

TEETH.

Don't forget "Tooth Brush Drill." If the particles of food left between the teeth after a meal are not removed, they go bad, collect germs, and cause decay of the teeth, and make your breath foul. Camphorated chalk, weak Condy's Fluid, salt and water, and even ordinary soap, will do to use with your brush. (Monkey Brand soap occasionally if much coated with fur.)

Decayed teeth cause indigestion and many other complaints.

The War Office attach so much importance to the condition of the teeth that many thousands of pounds have been spent on dental treatment

for men going on active service. Teeth which serve you quite well at home in peace time when you can PICK YOUR FOOD, go to pieces and are useless for hard rations, which you may not have time or convenience to soften.

Toothache. — Into the decayed tooth put cotton wool soaked in Oil of Cloves, or two drops of glycerine and one of liquid carbolic acid.

TOE NAILS.

Pare the nails straight across, not down the sides, or else the flesh will grow over, causing in-growing toe nail, which is crippling and painful. If the nails tend to grow in, scrape the centre of the nail thin with a pen knife. This makes it curl back. Boots should not be short or narrow.

TEMPERANCE.

Englishmen have never been accused of want of courage. It is foreign to our race. But drunkenness and debauchery strike at the very roots of courage and health, and no army is at its best where these are permitted. In the army of Marlborough, one of the best governed armies we ever had, and the most successful, we are told that "the sot and the drunkard were the objects of scorn."

To make an army perfectly brave, it must be made temperate

and chaste.

Good health and physical strength, by increasing self-confidence, increase courage; and self-reliance is the consequence of feeling that, under all circumstances, we can face the dangers and difficulties that present themselves. Intemperance is bad anywhere. In hot countries it is fatal.

Remember the expression "peg" meant a peg in a man's coffin.

TINNED FOODS

are issued as a ration or bought as an extra. Remember: the top and bottom should be hollow, not flat or bulging, the sides should be free from irregular bulging. The tin should not sound hollow or drumlike when struck, and no gas should escape when it is opened. Any jelly round meat should be solid (except in very hot weather). The contents should neither smell nor taste disagreeable. Be specially careful about tins with two solder marks.

TRAINING.

The keynote of training is moderation in the early stages. "Train" but do not "strain." Do little hard work at first and gradually increase. Live regularly,

temperately, and exercise the particular muscles you are going to use. The best work can be done easily and naturally by healthy men only. Exercise should be regular, and it will strengthen you physically, mentally, and morally, and give you courage and confidence.

VACCINATION.

Very wisely, in my opinion, the Government insist on vaccination. Without wearying you with figures, the best vaccinated troops in the world are the freest from smallpox. Anti-vaccinators talk about polluting your blood with "filth" and "poison." Think of the tens of thousands of men recently vaccinated, improving daily in health and physique and leaving our shores magnificently fit.

VERMIN.

A man who keeps himself clean should not be troubled with this

complaint, which, like many other nasty things, is the consequence of improper care of his person. In camps and billets at home, the presence of body or head lice is quite inexcusable and deserves punishment. On service it may be different, as the opportunities for washing may be absent or infrequent, and the surroundings cannot be chosen and may be infested before occupied.

Take all opportunities of washing and changing that offer themselves. Paraffin is an excellent remedy for head or body, and soaking the underlinen in hot water is sometimes possible. A "jail crop" of the hair will clear away most of the nits or eggs. The cement which causes them to cling to the hair is not dissolved by water at a washing temperature.

Blankets should be baked or steamed in a moderately hot oven or

steriliser, which kills but does not remove the vermin, for Angus said to Donald, on inspecting his blanket after stoving, "Man, they're a' there yet. See!" Donald, who was an optimist, replied "Aye, but they must ha' gotten an awfu' fricht."

Rubbing the scalp with methylated spirit, with subsequent washing, sometimes answers well.

Besides the head and body lice, a specially irritating parasite is sometimes found in the hair at the bottom of the body. Like all other vermin, it causes intense irritation. It is popularly known as the crab louse, and can be killed by cutting the hair quite close and applying mercurial ointment (blue or "trooper's ointment"), or white precipitate ointment.

Lastly, the Itch insect burrows under the skin and causes, as its name implies, intolerable tickling, especially when in bed and warm. It is found on the hands between the fingers, where the skin is soft and easily penetrated; the armpits, and inside of the legs. Report to the medical officer, as the complaint is very catching, and in his absence use sulphur ointment, after free bathing with hot water. See that your underclothing is boiled, and keep to your own towels and articles of clothing.

VENTILATION

is important, whether in tent or quarters. No person can be healthy without fresh air, cleanliness, pure water, outdoor exercise, and good food. Windows should be open top and bottom all day and at the top all night. Fresh air and sunshine are the best disinfectants. Tent curtains should be rolled up and flys wide open on fine days.

F 2

Carry out bedding, blankets, and great-coats into the open air to get a good blow. Neatly folded, and dressed in a straight line, they should not disfigure the lines.

Don't wrap up the bedding in waterproof ground sheets (they keep the air out), but lay it on the top. There are usually tent orderlies or duty men in the lines who should be instructed to cover the bedding up if it rains. See that the bibs at the top of the tent are properly open always.

A tent containing 12 or 16 men contains under 500 cubic feet of air, whereas the regulation allowance is 600 feet and upwards per man.

Tents, wet with rain or dew, allow of no current of air through the canvas. If you have boarded floors, they should be taken out twice weekly, and the ground swept clear of litter, mould, and decayed grass.

WARTS.

Pare off the hard, dry skin and touch with a drop of acetic acid, castor oil, or oil of cinnamon, or saliva first thing in the morning. The best paint is made from a teaspoonful of salicylic acid in an ounce of collodion.

WATER.

The more I work amongst soldiers the more I feel how no language is too strong when used to warn them against indiscriminate water-drinking. On the march I have seen men drink greedily at water running off from a surface drain from land recently manured with town refuse.

In camp I have caught them drinking water from ablution taps, suitable for washing purposes only.

WATER BOTTLES

may be sweetened by boiling water and soda, or borax is a useful addition. If done once a week they do not easily get "fusty" or taint any fluid put into them. To cool contents wrap a wet rag round, or if felt-covered, wet and place in a draught.

WATER SUPPLY.

Simple Water Test.

To ascertain if water is free from organic pollution, place a lump of sugar in a bottle nearly full, and cork up, and if after thus excluding the air and keeping the bottle in the light for two or three days no milky cloud is apparent, but the water remains clear, it may be considered free from sewage matter.

Some of you who read these lines may serve in a country where the

water is both scarce and bad.

Dr. Jameson says of South African water, that it should be first boiled, then filtered, and then—thrown away.

Many a gallant lad lies under a foreign sod, the victim to a drink of water.

The temptation to drink anything when crazy with thirst is sometimes irresistible. The man who can refrain from indulgence of any kind, even from water, unless it is absolutely necessary, is, of course, the material out of which the "fittest" to survive hardship are made.

Remember, that bright, clear, sparkling water may be laden with deadly fever germs, and never drink at wayside wells and streams, unless the water is passed as "fit" by the medical officer. When you do get to wholesome water, always make a point of filling your water bottle.

Always start on the march and go on outpost with your water bottle full.

Excellent filters are now supplied to troops, and boiling for half-an-hour will destroy most animal poisons.

Drinking water taken direct from rivers is generally muddy. It may be cleared by adding as much alum as would cover a threepenny-bit to each gallon.

Major Browne, R.A.M.C., after the clearing adds 1 part of chlorine to 500,000 parts of water, and has found this makes water safe to drink and not unpalatable. He uses 5-grain tablets of chlorate of potash and hydrochloric acid, and found a Sepoy could work it easily. For 5s. 4d. he could purify one gallon of water each for 1,000 men in 30 minutes. Boiling water costs for fuel £12 10s. to get the same results.

Restrain your desire to drink till such time as, by means of field filters and other proper means, water is provided that you may safely drink.

The terrible mortality from fever, which up to the present war was twice as great as that of men killed in action, shows the necessity for heeding this caution.

Water that is not up to the mark should be boiled with tea, and the tea drunk cold.

No admixture of wine or spirit counteracts the poison in tainted water and makes it safe to drink; but the simple process of boiling renders it perfectly harmless.

N.B.—Be very careful lest any act of yours should foul any source of water supply.

WET FEET.

Everybody should know the danger of wet feet. Wet boots and socks should be changed on the first opportunity, and the feet rubbed till dry and warm.

WOUNDS.

Keep them clean, wash freely in clean water, if available, and apply clean rag and bandage.

Shrapnel, during the war, have been filled by the enemy with roughened bullets and packed in phosphorus powder to cause more dangerous wounds.

The object we have in view in treating wounds is to keep out "germs," which cause them to "fester" and go the wrong way, and so prevents healing.

Soldiers going on active service are now served out with small, thin glass tubes of iodine, wrapped in a

soft covering and enclosed in a cardboard tube. When wounded break the glass container, the iodine soaks into the pad, and with this cleanse the wound and skin round it. This kills any germs and may save you from infection, such as the terrible "gas gangrene."

The First Field Dressing, sewn inside every man's coat on active service consists of a dressing of antiseptic (that is germ-killing) material, with a pad, a waterproof cover, bandage, and safety-pins to keep it in place. In hot weather this dressing also keeps out the plague of flies which settles on wounds.

The dressing may be divided into two if there are two or more wounds. Be very careful not to drop the dressing and thus get it soiled.

Imitate this with the materials you have at hand; clean cotton

wool, rag, and lint, are good dressings.

If there is much bleeding, apply a firm pad over the wound, and fix it in position with a bandage. If a limb is injured, tie a cord or piece of bandage tightly above and below the wound.

If this does not stop the bleeding, make a tourniquet by passing a stick or bayonet scabbard under the bandage and twist it round till the bleeding stops; then stop at once and tie it, so that it will not slip. More pressure may do serious harm. A tourniquet, no matter by whom applied, must be removed as soon as it can safely be done.

Don't put anything dirty or irritating on the wound, such as greasy cotton waste, cobwebs, or tobacco.

YELLOW FEVER (see Mosquitoes).

And now I have gone over the commoner points affecting your health, which are most likely to be useful to you, and have endeavoured to show you how to retain your fitness, under the varying conditions of service, I will conclude by reminding you that the soldier of today is very differently thought of to what he was in our grandfathers' time.

There is not greater honour, to my thinking, than to wear His Majesty's uniform. See to it that you never disgrace it, and keep yourself well and ready to wear it in any part of his dominions if duty call.





